

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of claims

Claim 1: (Currently amended) A method of automatically allocating additional hardware resources to a computer having a plurality of hardware resources, said method comprising:

monitoring use of selected ones of the plurality of hardware resources by the computer to obtain historical utilization data pertaining to the historical availability to the computer of each ~~of the~~ monitored hardware resource ~~resources~~;

establishing a statistical analysis technique specific to each monitored hardware resource;

automatically analyzing, according to ~~[[an]]~~ the statistical analysis technique ~~specific to each selected one of the hardware resources~~, the ~~obtained~~ historical utilization data for each monitored hardware resource to arrive at a prediction of a future level of availability of ~~[[a]]~~ each monitored hardware resource;

providing a first signal when the prediction of the future level of availability of ~~[[the]]~~ each monitored hardware resource fails to meet an availability threshold; ~~[[and]]~~

automatically executing a new ~~updating the~~ statistical analysis technique based on ~~[[said]]~~ a second signal; and

without user intervention, responding to the first signal by automatically reserving or ordering an additional physical hardware resource that is not in the computer when the signal is provided and which is to be later manually physically added to the computer after the reserving or placing of an order.

Claim 2: (Currently amended) The method of claim 1 further comprising the step of:

performing at least one calculation with respect to certain of the obtained historical usage data.

Claim 3: (Previously presented) The method of claim 1 wherein said step of responding to the signal by automatically reserving or ordering occurs when the prediction indicates that the resources are below the availability threshold.

Claim 4: (Currently amended) The method of claim 1 further comprising the step of:

without user intervention, enabling the ~~[[reduction]]~~ deallocation of the monitored hardware resources when the prediction indicates that the monitored hardware resources will not be required.

Claim 5: (Cancelled)

Claim 6: (Currently amended) The method of claim 1 wherein the first signal is in graphical form for each of the monitored hardware resources.

Claim 7: (Previously presented) The method of claim 1 wherein said step of analyzing comprises the step of:

analyzing available applications with respect to the utilization by the available applications of the monitored hardware resources.

Claim 8: (Previously presented) The method of claim 1 wherein the monitored hardware resources are selected from the set of resources, including memory, CPU, Disk, available ports, and network resources.

Claim 9: (Currently amended) A method of adjusting hardware resources in a computer having a plurality of the hardware resources, said method comprising:

monitoring use of selected ones of the plurality of hardware resources by the computer to obtain historical utilization data pertaining to the historical availability to the computer of each ~~[[the]]~~ monitored hardware resource;

establishing a statistical analysis technique specific to each monitored hardware resource;

automatically analyzing, according to ~~[[an]]~~ the statistical analysis technique ~~specific to each selected one of the hardware resources,~~ ~~[[said]]~~ the obtained historical utilization data to provide a prediction of a future level of availability of ~~[[the]]~~ each monitored hardware resource;

automatically executing a new ~~updating the~~ statistical analysis technique; and
without user intervention, enabling an adjustment in resources when the prediction of the future level of availability of the monitored resource fails to meet an availability threshold.

Claim 10: (Currently amended) The method of claim 9 further comprising the step of:

performing at least one calculation with respect to certain of the obtained historical utilization data.

Claim 11: (Previously presented) The method of claim 9 wherein said step of enabling comprises the step of:

adding the hardware resources to the computer from a remote location.

Claim 12: (Previously presented) The method of claim 9 wherein said step of enabling comprises the step of:

removing the hardware resources from the computer.

Claim 13: (Currently amended) The method of claim 9 wherein said step of monitoring comprises the step of:

storing historical utilization data on resource utilization ~~usage~~.

Claim 14: (Currently amended) The method of claim 9 wherein said step of monitoring comprises the step of:

analyzing available applications with respect to ~~[[the]]~~ utilization by the available applications of the monitored hardware resources.

Claim 15: (Currently amended) A system for allocating additional hardware resources in a computer having a plurality of hardware resources said system comprising:

a monitoring unit monitoring use of selected ones of said plurality of hardware resources by the computer to obtain historical utilization data pertaining to the historical availability to the computer of each said selected one of said monitored hardware resource;

an analyzing unit automatically analyzing said obtained historical data to arrive at a prediction of a future level of availability of ~~[[a]]~~ the monitored hardware resource, said analyzing unit capable of performing the analysis based on ~~[[an]]~~ a statistical technique specific to each said selected one of said hardware resources;

a signal providing unit providing a first signal when said prediction of the future level of availability of the monitored resource fails to meet an availability threshold; and

without user intervention, means for responding to ~~[[the]]~~ said first signal by automatically allocating an additional hardware resource to be manually physically added to the computer,

wherein said analyzing unit is capable of automatically executing a new ~~modifying~~ ~~said~~ statistical analysis technique based on ~~[[said]]~~ a second signal.

Claim 16: (Currently amended) The system of claim 15 further comprising:

means for performing at least one calculation with respect to certain of said obtained historical utilization data.

Claim 17: (Cancelled)

Claim 18: (Previously presented) The system of claim 15 further comprising:

a unit operable without user intervention capable of enabling the reduction of said monitored hardware resources under control of said signal when said prediction indicates that the monitored hardware resources are not required.

Claim 19: (Currently amended) The system of claim 15 further comprising:

means for storing historical utilization data on resource utilization usage.

Claim 20: (Previously presented) The system of claim 15 wherein said signal is in graphical form for each of said monitored hardware resources.

Claim 21: (Previously presented) The system of claim 15 further comprising:

means for analyzing all available applications with respect to the utilization by the available applications of the monitored hardware resources.

Claim 22: (Previously presented) The system of claim 15 wherein said monitored hardware resources are selected from a group consisting of memory, CPU, Network, Disk, available ports, and network resources.

Claim 23: (Currently amended) A system of allocating additional hardware resources in a computer having a plurality of hardware resources, said system comprising:

means for monitoring use of selected ones of said plurality of hardware resources by the computer to obtain historical utilization data pertaining to the historical availability to the computer of each said monitored hardware resource;

means for establishing a statistical analysis technique specific to each monitored hardware resource;

means for automatically analyzing, according to ~~[[an]]~~ the statistical analysis technique ~~specific to each selected one of the hardware resources~~, said obtained historical utilization data to arrive at a prediction of a future level of availability of said monitored hardware resource;

means for automatically executing a new ~~updating said~~ statistical analysis technique; and

without user intervention, means for enabling an adjustment in said monitored hardware resources when said prediction of the future level of availability of said monitored hardware resource fails to meet an availability threshold.

Claim 24: (Currently amended) The system of claim 23 further comprising:

means for performing at least one calculation with respect to certain of said obtained historical utilization data.

Claim 25: (Previously presented) The system of claim 23 wherein said means for enabling comprises:

means for adding resources to the computer from a remote location.

Claim 26: (Currently amended) The system of claim 23 wherein said means for enabling comprises:

means for removing resources from the computer.

Claim 27: (Currently amended) The system of claim 23 wherein said means for monitoring comprises:

means for storing historical utilization data on resource utilization ~~usage~~.

Claim 28: (Currently amended) The system of claim 23 wherein said means for monitoring comprises:

means for analyzing all available applications with respect to ~~[[the]]~~ utilization by the available applications of the monitored hardware resources.

Claim 29: (Currently amended) A computer program product operational in conjunction with a processor for allocating additional hardware resources in a computer having a plurality of hardware resources, said product comprising:

a monitor monitoring use of selected ones of said plurality of hardware resources by the computer to obtain historical utilization data pertaining to the historical availability to the computer of each said selected one of said monitored hardware resource;

an analyzer automatically analyzing said obtained historical data to arrive at a prediction of a future level of availability of ~~[[a]]~~ the monitored hardware resource, said analyzer capable of performing the analysis based on ~~[[an]]~~ a statistical analysis technique specific to each said selected one of said hardware resources, said analyzer capable of automatically executing a new statistical ~~modifying said~~ analysis technique; and

an adjusting unit operable without user intervention capable of automatically allocating for manual physical addition, resources according to the analyzing.

Claim 30: (Currently amended) The computer product of claim 29 further including:

a unit operable in cooperation with said analyzer performing at least one calculation with respect to certain of said obtained historical utilization data.

Claim 31: (Previously presented) The computer product of claim 29 wherein said adjusting unit comprises:

means for adding resources to the computer from a remote location.

Claim 32: (Previously presented) The computer product of claim 29 wherein said adjusting unit comprises:

means for removing resources from the computer.

Claim 33: (Currently amended) The computer product of claim 29 wherein said analyzer is capable of storing historical utilization data on resource usage.

Claim 34: (Cancelled)

Claim 35: (Cancelled)

Claim 36: (Cancelled)